1. (Amended) A device for converting between electrical energy and mechanical energy, the device comprising at least one electroactive polymer having a first active area, the first active area comprising at least two first active area electrodes and a first portion of the at least one electroactive polymer, the first portion arranged in a manner which causes the first portion to deform in response to a change in electric field provided by the at least two first active area electrodes and/or arranged in a manner which causes a change in electric field in response to deformation of the first portion, wherein the device is arranged such that deformation of the first portion in response to a change in electric field and/or deformation of the first portion causing a change in electric field is at least partially assisted by mechanical input energy.

2. (Amended) The device of claim 1 wherein the mechanical input energy is substantially equal to the elastic energy required to deform the first portion of the electroactive polymer for a part of the deformation.

3. (Amended) The device of claim 2 wherein the mechanical input energy is substantially equal to the elastic energy required to deform the first portion of the electroactive polymer for an entire deformation corresponding to an actuation.

4. (Amended) The device of claim 1 wherein the mechanical input energy is less than the elastic energy required to deform the first portion of the electroactive polymer for a part of the deformation.

8. (Amended) The device of claim 5 further comprising a second active area, the second active area comprising at least two second active area electrodes and a third portion of the at least one electroactive polymer, the third portion arranged in a manner which causes the third portion to deform in response to a change in electric field provided by the at least two second active area electrodes and/or arranged in a manner which causes a change in electric field in response to deformation of the third portion.

10. (Amended) The device of claim 8 wherein the first active area and the second active area are arranged such that deformation of the first portion comprises a direction of contraction that is at least partially linearly aligned with a direction of expansion for the third portion.

15. (Amended) The device of claim 1 wherein the at least one electroactive polymer is arranged such that elastic potential energy of the at least one electroactive polymer is independent of deformation in response to a change in electric field provided by the at least two first active area electrodes and/or deformation which causes a change in electric field.

19. (Amended) A device for converting between electrical energy and mechanical energy, the device comprising at least one electroactive polymer, the at least one electroactive polymer comprising a first active area, the first active area comprising at least two first active area electrodes and a first portion of the at least one electroactive polymer, the first portion arranged in a manner which causes the first portion to deform in response to a change in electric field provided by the at least two first active area electrodes and/or arranged in a manner which causes a change in electric field in response to deformation of the first portion, wherein the at least one electroactive polymer is arranged such that elastic potential energy of the device is substantially independent of deformation of the first portion in response to a change in electric field and/or deformation of the first portion causing a change in electric field.

20. (Amended) The device of claim 19 wherein the at least one electroactive polymer is arranged such that elastic potential energy of the device is substantially constant during deformation of the first portion in response to a change in electric field and/or deformation of the first portion causing a change in electric field.

21. (Amended)The device of claim 20 further comprising a home position having a lower elastic potential energy than the substantially constant elastic potential energy of the device during deformation of the first portion.

22. (Amended)The device of claim 19 further comprising a second active area, the second active area comprising at least two second active area electrodes and a second portion of the at least one

electroactive polymer, the second portion arranged in a manner which causes the second portion to deform in response to a change in electric field provided by the at least two second active area electrodes and/or arranged in a manner which causes a change in electric field in response to deformation of the second portion.

23. (Amended) The device of claim 22 wherein the first active area and the second active area are arranged such that deformation of the first portion includes a direction of contraction that is at least partially linearly aligned with a direction of expansion for the second portion.

26. (Amended) The device of claim 19 further comprising a mechanism that assists substantially independent elastic potential energy deformation of the device.

27. (Amended) The device of claim 26 wherein the mechanism is a motion constraint that constrains the deformation of the device.

28. (Amended) A method of using at least one electroactive polymer, the at least one electroactive polymer comprising a first active area, the first active area comprising at least two first active area electrodes and a first portion of the at least one electroactive polymer, the method comprising deflecting the first portion such that elastic potential energy of the at least one electroactive polymer is substantially constant for the deformation.

29. (Amended) The method of claim 28 wherein the deformation is in response to a change in electric field provided by the at least two first active area electrodes.

36. (Amended) The method of claim 30 wherein the first portion and second portion are deformed to move a third portion of the at least one electroactive polymer along a path.

37. (Amended) The method of claim 28 wherein the first portion is deformed in resonant mode.